

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=9; day=3; hr=13; min=58; sec=46; ms=742;]

=====

Application No: 10586310 Version No: 1.0

Input Set:**Output Set:**

Started: 2009-08-21 13:39:35.882
Finished: 2009-08-21 13:40:04.438
Elapsed: 0 hr(s) 0 min(s) 28 sec(s) 556 ms
Total Warnings: 46
Total Errors: 0
No. of SeqIDs Defined: 52
Actual SeqID Count: 52

| Error code | Error Description |
|------------|---|
| W 402 | Undefined organism found in <213> in SEQ ID (1) |
| W 402 | Undefined organism found in <213> in SEQ ID (2) |
| W 402 | Undefined organism found in <213> in SEQ ID (5) |
| W 402 | Undefined organism found in <213> in SEQ ID (6) |
| W 402 | Undefined organism found in <213> in SEQ ID (7) |
| W 402 | Undefined organism found in <213> in SEQ ID (8) |
| W 402 | Undefined organism found in <213> in SEQ ID (9) |
| W 402 | Undefined organism found in <213> in SEQ ID (10) |
| W 402 | Undefined organism found in <213> in SEQ ID (11) |
| W 402 | Undefined organism found in <213> in SEQ ID (12) |
| W 402 | Undefined organism found in <213> in SEQ ID (13) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (14) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (15) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (16) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (17) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (18) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (19) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (20) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (21) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (22) |

Input Set:

Output Set:

Started: 2009-08-21 13:39:35.882

Finished: 2009-08-21 13:40:04.438

Elapsed: 0 hr(s) 0 min(s) 28 sec(s) 556 ms

Total Warnings: 46

Total Errors: 0

No. of SeqIDs Defined: 52

Actual SeqID Count: 52

| Error code | Error Description |
|------------|---|
| W 213 | Artificial or Unknown found in <213> in SEQ ID (23) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (24) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (25) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (26) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (27) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (28) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (29) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (30) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (31) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (32) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (33) |
| | This error has occurred more than 20 times, will not be displayed |

SEQUENCE LISTING

<110> GARCIA-CALVO, MARIA MARGARITA

<120> NPC1L1 (NPC3) AND METHODS OF IDENTIFYING LIGANDS THEREOF

<130> 059893-0121

<140> 10586310

<141> 2009-08-21

<150> PCT/US05/01469

<151> 2005-01-14

<150> 60/537,341

<151> 2004-01-16

<160> 52

<170> PatentIn version 3.5

<210> 1

<211> 3996

<212> DNA

<213> Rattus sp.

<220>

<221> CDS

<222> (1)..(3996)

<400> 1

| | |
|---|----|
| atg gca gct gcc tgg ctg gga tgg ctg ctc tgg gcc ctg ctc ctg agc | 48 |
| Met Ala Ala Ala Trp Leu Gly Trp Leu Leu Trp Ala Leu Leu Leu Ser | |
| 1 5 10 15 | |

| | |
|---|----|
| gcg gcc cag ggt gag cta tac aca ccc aaa cac gaa gct ggg gtc tgc | 96 |
| Ala Ala Gln Gly Glu Leu Tyr Thr Pro Lys His Glu Ala Gly Val Cys | |
| 20 25 30 | |

| | |
|---|-----|
| acc ttt tac gaa gag tgc ggg aaa aac cca gag ctc tct gga ggc ctc | 144 |
| Thr Phe Tyr Glu Glu Cys Gly Lys Asn Pro Glu Leu Ser Gly Gly Leu | |
| 35 40 45 | |

| | |
|---|-----|
| acg tca cta tcc aat gta tcc tgc ctg tct aac acc ccg gcc cgc cac | 192 |
| Thr Ser Leu Ser Asn Val Ser Cys Leu Ser Asn Thr Pro Ala Arg His | |
| 50 55 60 | |

| | |
|---|-----|
| gtc acg ggt gaa cac ctg gct ctt ctc cag cgc atc tgt ccc cgc ctg | 240 |
| Val Thr Gly Glu His Leu Ala Leu Leu Gln Arg Ile Cys Pro Arg Leu | |
| 65 70 75 80 | |

| | |
|---|-----|
| tac aac ggc ccc aat acc act ttt gcc tgt tgc tct acc aag cag ctg | 288 |
| Tyr Asn Gly Pro Asn Thr Thr Phe Ala Cys Cys Ser Thr Lys Gln Leu | |
| 85 90 95 | |

| | |
|---|------|
| ctg tcc tta gaa agc agc atg tcc atc acc aag gcc ctt ctc acg cgc | 336 |
| Leu Ser Leu Glu Ser Ser Met Ser Ile Thr Lys Ala Leu Leu Thr Arg | |
| 100 105 110 | |
| tgc ccg gcc tgc tct gac aat ttt gtg agc tta cac tgc cac aac act | 384 |
| Cys Pro Ala Cys Ser Asp Asn Phe Val Ser Leu His Cys His Asn Thr | |
| 115 120 125 | |
| tgc agc cct gac cag agc ctc ttc atc aac gtc acc cgg gtg gtt gag | 432 |
| Cys Ser Pro Asp Gln Ser Leu Phe Ile Asn Val Thr Arg Val Val Glu | |
| 130 135 140 | |
| cgg ggc gct gga gag cct cct gcc gtg gtg gcc tat gag gcc ttt tat | 480 |
| Arg Gly Ala Gly Glu Pro Pro Ala Val Val Ala Tyr Glu Ala Phe Tyr | |
| 145 150 155 160 | |
| cag cgc agc ttt gct gag aag gcc tat gag tcc tgc agc cag gtg cgc | 528 |
| Gln Arg Ser Phe Ala Glu Lys Ala Tyr Glu Ser Cys Ser Gln Val Arg | |
| 165 170 175 | |
| atc cct gcg gcc gct tcc ttg gcc gtg ggc agc atg tgt gga gtg tat | 576 |
| Ile Pro Ala Ala Ala Ser Leu Ala Val Gly Ser Met Cys Gly Val Tyr | |
| 180 185 190 | |
| ggc tcc gcc ctc tgc aat gct cag cgc tgg ctc aac ttc caa gga gac | 624 |
| Gly Ser Ala Leu Cys Asn Ala Gln Arg Trp Leu Asn Phe Gln Gly Asp | |
| 195 200 205 | |
| aca ggg aat ggc ctg gct ccg ctg gat atc acc ttc cac ctc ttg gag | 672 |
| Thr Gly Asn Gly Leu Ala Pro Leu Asp Ile Thr Phe His Leu Leu Glu | |
| 210 215 220 | |
| cct ggc cag gcc cta ccg gat ggg atc cag cca ctg aat ggg aag atc | 720 |
| Pro Gly Gln Ala Leu Pro Asp Gly Ile Gln Pro Leu Asn Gly Lys Ile | |
| 225 230 235 240 | |
| gca ccc tgc aac gag tct cag ggt gat gac tca gca gtc tgc tcc tgc | 768 |
| Ala Pro Cys Asn Glu Ser Gln Gly Asp Asp Ser Ala Val Cys Ser Cys | |
| 245 250 255 | |
| cag gac tgt gcg gcg tcc tgc cct gtc atc cct ccg ccc gag gcc ttg | 816 |
| Gln Asp Cys Ala Ala Ser Cys Pro Val Ile Pro Pro Pro Glu Ala Leu | |
| 260 265 270 | |
| cgc cct tcc ttc tac atg ggt cgc atg cca ggc tgg ctg gcc ctc atc | 864 |
| Arg Pro Ser Phe Tyr Met Gly Arg Met Pro Gly Trp Leu Ala Leu Ile | |
| 275 280 285 | |
| atc atc ttc act gct gtc ttt gtg ttg ctc tct gca gtc ctt gtg cgt | 912 |
| Ile Ile Phe Thr Ala Val Phe Val Leu Leu Ser Ala Val Leu Val Arg | |
| 290 295 300 | |
| ctc cga gtg gtt tcc aac agg aac aag aac aag gca gaa ggc ccc cag | 960 |
| Leu Arg Val Val Ser Asn Arg Asn Lys Asn Lys Ala Glu Gly Pro Gln | |
| 305 310 315 320 | |
| gaa gcc ccc aaa ctc cct cat aag cac aaa ctc tca ccc cat acc atc | 1008 |

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Glu | Ala | Pro | Lys | Leu | Pro | His | Lys | His | Lys | Leu | Ser | Pro | His | Thr | Ile | |
| | | | | 325 | | | | | 330 | | | | | 335 | | |
| ctg | ggc | cgg | ttc | ttc | cag | aac | tgg | ggc | aca | agg | gtg | gcc | tcg | tgg | cca | 1056 |
| Leu | Gly | Arg | Phe | Phe | Gln | Asn | Trp | Gly | Thr | Arg | Val | Ala | Ser | Trp | Pro | |
| | | | 340 | | | | | 345 | | | | | 350 | | | |
| ctc | acc | gtc | tta | gca | ctg | tcc | ttc | atc | gtt | gtg | ata | gcc | tta | gca | gca | 1104 |
| Leu | Thr | Val | Leu | Ala | Leu | Ser | Phe | Ile | Val | Val | Ile | Ala | Leu | Ala | Ala | |
| | | | 355 | | | | 360 | | | | | 365 | | | | |
| ggc | ctg | acc | ttt | att | gaa | ctc | acc | aca | gac | cct | gtg | gaa | ctg | tgg | tcg | 1152 |
| Gly | Leu | Thr | Phe | Ile | Glu | Leu | Thr | Thr | Asp | Pro | Val | Glu | Leu | Trp | Ser | |
| | 370 | | | | | 375 | | | | | 380 | | | | | |
| gcc | ccc | aag | agc | cag | gcc | cgg | aaa | gag | aag | tct | ttc | cat | gat | gag | cat | 1200 |
| Ala | Pro | Lys | Ser | Gln | Ala | Arg | Lys | Glu | Lys | Ser | Phe | His | Asp | Glu | His | |
| 385 | | | | | 390 | | | | | 395 | | | | | 400 | |
| ttc | ggc | ccc | ttc | ttt | cga | acc | aac | cag | att | ttc | gtg | aca | gct | cgg | aac | 1248 |
| Phe | Gly | Pro | Phe | Phe | Arg | Thr | Asn | Gln | Ile | Phe | Val | Thr | Ala | Arg | Asn | |
| | | | 405 | | | | | 410 | | | | | | 415 | | |
| agg | tcc | agc | tac | aag | tac | gac | tcc | cta | ctg | cta | ggg | tcc | aag | aac | ttc | 1296 |
| Arg | Ser | Ser | Tyr | Lys | Tyr | Asp | Ser | Leu | Leu | Leu | Gly | Ser | Lys | Asn | Phe | |
| | | | 420 | | | | | 425 | | | | | 430 | | | |
| agt | ggg | atc | ctg | tcc | ctg | gac | ttc | ctg | ctg | gag | ctg | ctg | gag | ctt | cag | 1344 |
| Ser | Gly | Ile | Leu | Ser | Leu | Asp | Phe | Leu | Leu | Glu | Leu | Leu | Glu | Leu | Gln | |
| | | 435 | | | | 440 | | | | | 445 | | | | | |
| gag | agg | ctt | cga | cac | ctg | caa | gtg | tgg | tcc | cct | gag | gca | gag | cgc | aac | 1392 |
| Glu | Arg | Leu | Arg | His | Leu | Gln | Val | Trp | Ser | Pro | Glu | Ala | Glu | Arg | Asn | |
| | 450 | | | | | 455 | | | | | 460 | | | | | |
| atc | tcc | ctc | cag | gac | atc | tgc | tat | gcc | ccc | ctc | aac | cca | tat | aac | acc | 1440 |
| Ile | Ser | Leu | Gln | Asp | Ile | Cys | Tyr | Ala | Pro | Leu | Asn | Pro | Tyr | Asn | Thr | |
| 465 | | | | | 470 | | | | | 475 | | | | | 480 | |
| agc | ctc | tcc | gac | tgc | tgt | gtc | aac | agc | ctc | ctt | cag | tac | ttc | cag | aac | 1488 |
| Ser | Leu | Ser | Asp | Cys | Cys | Val | Asn | Ser | Leu | Leu | Gln | Tyr | Phe | Gln | Asn | |
| | | | 485 | | | | | 490 | | | | | 495 | | | |
| aac | cgc | acc | ctc | ctg | atg | ctc | acg | gcc | aac | cag | act | ctg | aat | ggc | cag | 1536 |
| Asn | Arg | Thr | Leu | Leu | Met | Leu | Thr | Ala | Asn | Gln | Thr | Leu | Asn | Gly | Gln | |
| | | | 500 | | | | | 505 | | | | | 510 | | | |
| acc | tcc | ctg | gtg | gac | tgg | aag | gac | cat | ttc | ctc | tac | tgt | gca | aat | gcc | 1584 |
| Thr | Ser | Leu | Val | Asp | Trp | Lys | Asp | His | Phe | Leu | Tyr | Cys | Ala | Asn | Ala | |
| | | | 515 | | | | 520 | | | | | 525 | | | | |
| cct | ctc | acg | ttc | aaa | gat | ggc | acg | tct | ctg | gcc | ctg | agc | tgc | atg | gct | 1632 |
| Pro | Leu | Thr | Phe | Lys | Asp | Gly | Thr | Ser | Leu | Ala | Leu | Ser | Cys | Met | Ala | |
| | 530 | | | | | 535 | | | | 540 | | | | | | |
| gac | tac | ggg | gct | cct | gtc | ttc | ccc | ttc | ctt | gct | gtt | ggg | gga | tac | caa | 1680 |
| Asp | Tyr | Gly | Ala | Pro | Val | Phe | Pro | Phe | Leu | Ala | Val | Gly | Gly | Tyr | Gln | |

| | | | | |
|---|-----|-----|-----|------|
| 545 | 550 | 555 | 560 | |
| ggc acg gac tat tcc gag gca gaa gcg ctg atc ata acc ttc tct ctc | | | | 1728 |
| Gly Thr Asp Tyr Ser Glu Ala Glu Ala Leu Ile Ile Thr Phe Ser Leu | | | | |
| | 565 | 570 | 575 | |
| aat aac tac ccc gct gat gat ccc cgc atg gcc cag gcc aag ctc tgg | | | | 1776 |
| Asn Asn Tyr Pro Ala Asp Asp Pro Arg Met Ala Gln Ala Lys Leu Trp | | | | |
| | 580 | 585 | 590 | |
| gag gag gct ttc ttg aag gaa atg gaa tcc ttc cag agg aac aca agt | | | | 1824 |
| Glu Glu Ala Phe Leu Lys Glu Met Glu Ser Phe Gln Arg Asn Thr Ser | | | | |
| | 595 | 600 | 605 | |
| gac aag ttc cag gtt gcg ttc tca gct gag cgc tct ctg gag gat gag | | | | 1872 |
| Asp Lys Phe Gln Val Ala Phe Ser Ala Glu Arg Ser Leu Glu Asp Glu | | | | |
| | 610 | 615 | 620 | |
| atc aac cgc acc acc atc cag gac ctg cct gtc ttt gcc gtc agc tac | | | | 1920 |
| Ile Asn Arg Thr Thr Ile Gln Asp Leu Pro Val Phe Ala Val Ser Tyr | | | | |
| | 625 | 630 | 635 | 640 |
| att atc gtc ttc ctg tac atc tcc ctg gcc ctg ggc agc tac tcc aga | | | | 1968 |
| Ile Ile Val Phe Leu Tyr Ile Ser Leu Ala Leu Gly Ser Tyr Ser Arg | | | | |
| | 645 | 650 | 655 | |
| tgc agc cga gta gcg gtg gag tcc aag gct act ctg ggc cta ggt ggg | | | | 2016 |
| Cys Ser Arg Val Ala Val Glu Ser Lys Ala Thr Leu Gly Leu Gly Gly | | | | |
| | 660 | 665 | 670 | |
| gtg att gtt gtg ctg gga gca gtt ctg gct gcc atg ggc ttc tac tcc | | | | 2064 |
| Val Ile Val Val Leu Gly Ala Val Leu Ala Ala Met Gly Phe Tyr Ser | | | | |
| | 675 | 680 | 685 | |
| tac ctg ggt gtc ccc tct tct ctg gtt atc atc caa gtg gta cct ttc | | | | 2112 |
| Tyr Leu Gly Val Pro Ser Ser Leu Val Ile Ile Gln Val Val Pro Phe | | | | |
| | 690 | 695 | 700 | |
| ctg gtg cta gct gtg gga gct gac aac atc ttc atc ttt gtt ctt gag | | | | 2160 |
| Leu Val Leu Ala Val Gly Ala Asp Asn Ile Phe Ile Phe Val Leu Glu | | | | |
| | 705 | 710 | 715 | 720 |
| tac cag agg cta cct agg atg cct ggg gaa cag cga gag gct cac att | | | | 2208 |
| Tyr Gln Arg Leu Pro Arg Met Pro Gly Glu Gln Arg Glu Ala His Ile | | | | |
| | 725 | 730 | 735 | |
| ggc cgc acc ctg ggc agt gtg gcc ccc agc atg ctg ctg tgc agc ctc | | | | 2256 |
| Gly Arg Thr Leu Gly Ser Val Ala Pro Ser Met Leu Leu Cys Ser Leu | | | | |
| | 740 | 745 | 750 | |
| tct gag gcc atc tgc ttc ttt cta ggg gcc ctg acc ccc atg cca gct | | | | 2304 |
| Ser Glu Ala Ile Cys Phe Phe Leu Gly Ala Leu Thr Pro Met Pro Ala | | | | |
| | 755 | 760 | 765 | |
| gtg agg acc ttc gcc ttg acc tct ggc tta gca att atc ctc gac ttc | | | | 2352 |
| Val Arg Thr Phe Ala Leu Thr Ser Gly Leu Ala Ile Ile Leu Asp Phe | | | | |
| | 770 | 775 | 780 | |

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|------|
| ctg | ctc | cag | atg | act | gcc | ttt | gtg | gcc | ctg | ctc | tcc | ctg | gat | agc | aag | | 2400 |
| Leu | Leu | Gln | Met | Thr | Ala | Phe | Val | Ala | Leu | Leu | Ser | Leu | Asp | Ser | Lys | | |
| 785 | | | | | 790 | | | | | 795 | | | | | 800 | | |
| agg | cag | gag | gcc | tct | cgc | ccg | gat | gtc | tta | tgc | tgc | ttt | tca | acc | cgg | | 2448 |
| Arg | Gln | Glu | Ala | Ser | Arg | Pro | Asp | Val | Leu | Cys | Cys | Phe | Ser | Thr | Arg | | |
| | | | | 805 | | | | | 810 | | | | | 815 | | | |
| aag | ctg | ccc | cca | cct | aaa | gaa | aaa | gaa | ggc | ctc | tta | ctc | cgc | ttc | ttc | | 2496 |
| Lys | Leu | Pro | Pro | Pro | Lys | Glu | Lys | Glu | Gly | Leu | Leu | Leu | Arg | Phe | Phe | | |
| | | | 820 | | | | | 825 | | | | | 830 | | | | |
| cgc | aag | ata | tac | gct | cct | ttc | ctg | ctg | cac | aga | ttc | atc | cgc | cct | gtt | | 2544 |
| Arg | Lys | Ile | Tyr | Ala | Pro | Phe | Leu | Leu | His | Arg | Phe | Ile | Arg | Pro | Val | | |
| | | 835 | | | | | 840 | | | | | 845 | | | | | |
| gtg | atg | ctg | ctg | ttt | ctg | acc | ctg | ttt | gga | gca | aat | ctc | tac | tta | atg | | 2592 |
| Val | Met | Leu | Leu | Phe | Leu | Thr | Leu | Phe | Gly | Ala | Asn | Leu | Tyr | Leu | Met | | |
| | 850 | | | | | 855 | | | | | 860 | | | | | | |
| tgc | aac | atc | aac | gtg | ggg | cta | gac | cag | gag | ctg | gct | ctg | ccc | aag | gac | | 2640 |
| Cys | Asn | Ile | Asn | Val | Gly | Leu | Asp | Gln | Glu | Leu | Ala | Leu | Pro | Lys | Asp | | |
| 865 | | | | | 870 | | | | 875 | | | | | | 880 | | |
| tcg | tac | ttg | ata | gac | tac | ttc | ctc | ttt | ctg | aac | cga | tac | ctt | gaa | gtg | | 2688 |
| Ser | Tyr | Leu | Ile | Asp | Tyr | Phe | Leu | Phe | Leu | Asn | Arg | Tyr | Leu | Glu | Val | | |
| | | | | 885 | | | | | 890 | | | | | 895 | | | |
| ggg | cct | cca | gtg | tac | ttt | gtc | acc | acc | tcg | ggc | ttc | aac | ttc | tcc | agc | | 2736 |
| Gly | Pro | Pro | Val | Tyr | Phe | Val | Thr | Thr | Ser | Gly | Phe | Asn | Phe | Ser | Ser | | |
| | | | 900 | | | | | 905 | | | | | 910 | | | | |
| gag | gca | ggc | atg | aac | gcc | act | tgc | tct | agc | gca | ggc | tgt | aag | agc | ttc | | 2784 |
| Glu | Ala | Gly | Met | Asn | Ala | Thr | Cys | Ser | Ser | Ala | Gly | Cys | Lys | Ser | Phe | | |
| | | 915 | | | | | 920 | | | | | 925 | | | | | |
| tcc | cta | acc | cag | aaa | atc | cag | tat | gcc | agt | gaa | ttc | cct | gac | cag | tct | | 2832 |
| Ser | Leu | Thr | Gln | Lys | Ile | Gln | Tyr | Ala | Ser | Glu | Phe | Pro | Asp | Gln | Ser | | |
| | 930 | | | | | 935 | | | | | 940 | | | | | | |
| tac | gtg | gct | att | gct | gca | tcc | tcc | tgg | gta | gat | gac | ttc | atc | gac | tgg | | 2880 |
| Tyr | Val | Ala | Ile | Ala | Ala | Ser | Ser | Trp | Val | Asp | Asp | Phe | Ile | Asp | Trp | | |
| 945 | | | | | 950 | | | | | 955 | | | | | 960 | | |
| ctg | acc | ccg | tcc | tcc | tcc | tgc | tgt | cgc | ctt | tat | ata | cgt | ggc | ccc | cat | | 2928 |
| Leu | Thr | Pro | Ser | Ser | Ser | Cys | Cys | Arg | Leu | Tyr | Ile | Arg | Gly | Pro | His | | |
| | | | | 965 | | | | 970 | | | | | | 975 | | | |
| aag | gat | gag | ttc | tgt | ccc | tca | acg | gat | act | tcc | ttc | aac | tgc | tta | aaa | | 2976 |
| Lys | Asp | Glu | Phe | Cys | Pro | Ser | Thr | Asp | Thr | Ser | Phe | Asn | Cys | Leu | Lys | | |

| | |
|---|------|
| ttt cat aag tac ctg ccc tgg ttc ctg aat gat ccg ccc aat atc | 3069 |
| Phe His Lys Tyr Leu Pro Trp Phe Leu Asn Asp Pro Pro Asn Ile | |
| 1010 1015 1020 | |
| aga tgt ccc aaa ggg ggt cta gca gcg tat aga acg tct gtg aat | 3114 |
| Arg Cys Pro Lys Gly Gly Leu Ala Ala Tyr Arg Thr Ser Val Asn | |
| 1025 1030 1035 | |
| ttg agc tca gat ggc cag gtt ata gcc tcc cag ttc atg gcc tac | 3159 |
| Leu Ser Ser Asp Gly Gln Val Ile Ala Ser Gln Phe Met Ala Tyr | |
| 1040 1045 1050 | |
| cac aag ccc tta agg aac tca cag gac ttc aca gaa gct ctc cgg | 3204 |
| His Lys Pro Leu Arg Asn Ser Gln Asp Phe Thr Glu Ala Leu Arg | |
| 1055 1060 1065 | |
| gcg tcc cgg ttg cta gca gcc aac atc aca gct gac cta cgg aag | 3249 |
| Ala Ser Arg Leu Leu Ala Ala Asn Ile Thr Ala Asp Leu Arg Lys | |
| 1070 1075 1080 | |
| gtg cct ggg aca gat cca aac ttt gag gtc ttc cct tac acg atc | 3294 |
| Val Pro Gly Thr Asp Pro Asn Phe Glu Val Phe Pro Tyr Thr Ile | |
| 1085 1090 1095 | |
| tcc aac gtg ttc tac cag caa tac ctg acg gtc ctt cct gag gga | 3339 |
| Ser Asn Val Phe Tyr Gln Gln Tyr Leu Thr Val Leu Pro Glu Gly | |
| 1100 1105 1110 | |
| atc ttc acc ctt gct ctt tgc ttt gtg ccc acc ttt gtt gtc tgc | 3384 |
| Ile Phe Thr Leu Ala Leu Cys Phe Val Pro Thr Phe Val Val Cys | |
| 1115 1120 1125 | |
| tac ctc cta ctg ggc ctg gac atg tgc tca ggg atc ctc aac cta | 3429 |
| Tyr Leu Leu Leu Gly Leu Asp Met Cys Ser Gly Ile Leu Asn Leu | |
| 1130 1135 1140 | |
| ctc tcc atc att atg att ctc gtg gac acc att ggc ctc atg gct | 3474 |
| Leu Ser Ile Ile Met Ile Leu Val Asp Thr Ile Gly Leu Met Ala | |
| 1145 1150 1155 | |
| gtg tgg ggt atc agc tat aat gcg gta tcc ctc atc aac ctt gtc | 3519 |
| Val Trp Gly Ile Ser Tyr Asn Ala Val Ser Leu Ile Asn Leu Val | |
| 1160 1165 1170 | |
| acg gca gtg ggc atg tct gtg gag ttt gtg tcc cac atc act cgg | 3564 |
| Thr Ala Val Gly Met Ser Val Glu Phe Val Ser His Ile Thr Arg | |
| 1175 1180 1185 | |
| tcc ttt gct gta agc acc aag cct acc cgg ctg gag agg g | |